

### **REMARKS**

Claims 1-20 were examined and reported in the Office Action. Claims 1-20 are rejected. Claim 11 is amended. Claims 1-20 remain.

Applicant requests reconsideration of the application in view of the following remarks.

#### **I. In The Drawings**

The Office Action objects to Figure 1, because it is referred to as conventional in the specification and has not been labeled as prior art. Applicant respectfully disagrees. On Page 4, line 20, Applicant indicates that Fig. 1 is a "conceptual view." On page 12, line 11, Applicant describes Fig. 1 as "a conceptual view." The background discussion on page 5 relates to a *conventional HARQ technique* used in a conceptual system when a turbo code encoder consists of first and second convolutional encoders see Applicant's specification, page 4, lines 22-24. The conceptual system is discussed to show what would happen if the conceptual system was used. That is, an error floor effect would result (see Applicant's specification, page 6, lines 1-5). However, Fig. 1 itself does not represent the prior art.

Accordingly, withdrawal of the objection of Fig. 1 is respectfully requested.

#### **II. 35 U.S.C. § 103(a)**

It is asserted in the Office Action that claims 1-20 are rejected in the Office Action under 35 U.S.C. § 103(a), as being unpatentable over what is characterized as Applicant's Admitted Prior Art ("AAPR") in view of U. S. Patent No. 6,686,853 issued to Shen ("Shen"). Applicant respectfully traverses the aforementioned rejections for the following reasons.

According to MPEP §2142

"[t]o establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all

the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.” (*In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)).

Further, according to MPEP §2143.03, “[t]o establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. (*In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)).” “*All words in a claim must be considered* in judging the patentability of that claim against the prior art.” (*In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970), emphasis added.)

It is asserted in the Office Action that AAPR and Applicant’s Fig. 1 discloses a first TURBO code encoder and a second TURBO code encoder. Applicant respectfully disagrees. As asserted above, Applicant’s Fig. 1 is not admitted prior art, but rather is a conceptual view of a system including a *single* TURBO encoder consisting of a first and a second convolutional encoder (see Applicant’s specification, page 4, lines 22-24). Applicant further describes the difference with the conceptual system of Fig. 1 with Applicant’s claimed invention on page 21, lines 2-6 of the specification:

[e]ven though the turbo code encoder explained with reference to FIG. 1 also uses two encoders, it differs from the encoding apparatus according to the preferred embodiment of the present invention in that the turbo code encoder simultaneously transmits the encoding results of the two encoders to the decoding apparatus.

Shen discloses a device for iterative decoding using a single encoder (see Shen, Fig. 2.; paragraph [0020] “[f]or example, encoder 205 may be a trellis encoder, a parallel concatenated encoder (PCE) a low density parity check type encoder (LDPC) or a variety of other types of encoders.”). Therefore, Shen is simply relied on for describing an LDPC encoder, which Applicant describes on page3, line23 to page 4, line 8.

Nowhere in what is characterized in the Office Action as AAPR or Shen is it taught, disclosed or suggested to use a first LDPC encoder and a second LDPC encoder in parallel,

wherein the first LDPC code encoder transmits an output signal to the decoding apparatus at odd numbered retransmissions in response to a retransmission request from the decoding apparatus,

and the second LDPC code encoder transmits an output signal to the decoding apparatus at even numbered retransmissions in response to the retransmission request from the decoding apparatus.

Therefore, even if the Office Action characterized AAPR were combined with Shen, the resulting invention would still not include all of Applicant's claimed limitations. And, therefore, there would be no motivation to combine the Office Action characterized AAPR with Shen. Moreover, by viewing the disclosures of the Office Action characterized AAPR and Shen, one can not jump to the conclusion of obviousness without impermissible hindsight. According to MPEP 2142,

[t]o reach a proper determination under 35 U.S.C. 103, the examiner must step backward in time and into the shoes worn by the hypothetical 'person of ordinary skill in the art' when the invention was unknown and just before it was made. In view of all factual information, the examiner must then make a determination whether the claimed invention 'as a whole' would have been obvious at that time to that person. Knowledge of applicant's disclosure must be put aside in reaching this determination, yet kept in mind in order to determine the 'differences,' conduct the search and evaluate the 'subject matter as a whole' of the invention. The tendency to resort to 'hindsight' based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.

Applicant submits that without first reviewing Applicant's disclosure, no thought, whatsoever, would have been made to using a first LDPC encoder in parallel with a second LDPC encoder,

wherein the first LDPC code encoder transmits an output signal to the decoding apparatus at odd numbered retransmissions in response to a retransmission request from the decoding apparatus, and the second LDPC code encoder transmits an output signal to the decoding apparatus at even numbered retransmissions in response to the retransmission request from the decoding apparatus.

Neither the Office Action characterized AAPR, Shen, and therefore, nor the combination of the two, teach, disclose or suggest the limitations contained in Applicant's claims 1, 5, 11 and

14, as listed above. Since neither the Office Action characterized AAPR, Shen, and therefore, nor the combination of the two, teach, disclose or suggest all the limitations of Applicant's claims 1, 5, 11 and 14, Applicant's claims 1, 5, 11 and 14 are not obvious over the Office Action characterized AAPR in view of Shen since a *prima facie* case of obviousness has not been met under MPEP §2142. Additionally, the claims that directly or indirectly depend from claims 1, 5, 11 and 14, namely claims 2-4, 5-10, 12-13, and 15-20, respectively, would also not be obvious over the Office Action characterized AAPR in view of Shen for the same reason.

Accordingly, withdrawal of the 35 U.S.C. § 103(a) rejection for claims 1-20 is respectfully requested.

**CONCLUSION**

In view of the foregoing, it is submitted that claims 1-20 patentably define the subject invention over the cited references of record, and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the Examiner believes a telephone conference would be useful in moving the case forward, he is encouraged to contact the undersigned at (310) 207-3800.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§1.16 or 1.17, particularly, extension of time fees.

**PETITION FOR EXTENSION OF TIME**

Per 37 C.F.R. 1.136(a) and in connection with the Office Action mailed on June 28, 2006, Applicant respectfully petitions the Commissioner for a three (3) month extension of time, extending the period for response to December 28, 2006. The Commissioner is hereby authorized to charge payment to Deposit Account No. 02-2666 in the amount of \$510.00 to cover the petition filing fee for a 37 C.F.R. 1.17(a)(3) small entity. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR, & ZAFMAN LLP

Dated: December 27, 2006

By: 

Steven Laut, Reg. No. 47,736

12400 Wilshire Boulevard  
Seventh Floor  
Los Angeles, California 90025  
(310) 207-3800

**CERTIFICATE OF TRANSMISSION**

I hereby certify that this correspondence is being submitted electronically via EFS Web on the date shown below to the United States Patent and Trademark Office.

  
Jean Svoboda

Date: December 27, 2006